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SERBIA GRAPE AND WINE VALUE CHAIN ASSESSMENT

USAID SERBIA AGRIBUSINESS PROJECT



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ABBREVIATIONS

BDS	business development services
BSP	business service providers
CEFTA	Central European Free Trade Agreement
CIF	cost insurance freight
FDI	foreign direct investment
FOB	free on board
GAP	good agricultural practices
ha	hectare
HACCP	Hazard Analysis on Critical Control Points
HoReCa	hotels, restaurants, and catering
ISO	International Standardization Organization
IWC	International Wine Challenge
MoAFWM	Ministry of Agriculture, Forestry and Water Management
MT	metric ton
SIEPA	Serbia Investment and Export Promotion Agency
USAID	U.S. Agency for International Development
USDA/FAS	U.S. Department of Agriculture/Foreign Agricultural Service
VIVIS	Viticulturists and Winemakers Association of Serbia

EXECUTIVE SUMMARY

This is a study conducted under the U.S. Agency for International Development (USAID) Serbia Agribusiness Program to analyze the nature of the wine and table grape value chains in Serbia and to provide an upgrading strategy and specific suggestions for value chain support activities. The table grape and wine value chains are largely separate and thus are treated here separately. The bulk of the analysis is devoted to the wine value chain, which absorbs over 90 percent of grape production in Serbia. If we assume that a similar level of effort (cost of intervention) will roughly have the same relative effect (percent change) in both sectors, then a dollar spent on supporting the wine sector (\$140 million retail) will have seven times the sales impact of a dollar spent on supporting the table grape sector (\$19 million retail). However, building a production base of quality grapes will be a key pillar to improving long-term competitiveness for both value chains, and so interventions at the grower level will pay off in both chains. In the absence of reliable government statistics, most data presented are the authors' estimates based on key informant interviews.

WINE VALUE CHAIN

Serbia's wine subsector has great potential based on its rich history and ideal agro-climatic conditions, but fell into complete disarray due to a succession of war, communist production models, and a trade embargo. The last decade saw some recovery in the industry, but production volumes are still small and a wide quality divide still separates Serbian winemakers from the international and even the regional benchmark players. As a result, domestic winemakers lost share in the Serbian wine market to imports, mostly from Macedonia and Montenegro. However, if gaps in wine-grape production, operational efficiency, winemaking, product development skills, and effective marketing strategies, can be addressed, Serbian winemakers could displace a significant portion of the current \$42.5 million in wine imports.

Seventy five percent of the volume and 50 percent of the value of wine sold in Serbia are in the below-RSD300 retail price range. Serbian wines are present in each market segment, but they dominate only in the low- and high-end segments. In the mid-range price segments, Serbian wineries have a hard time matching the quality of imported wines. In the premium price segments, Serbian wines are overpriced relative to imported products of similar quality. Although Serbia exports 9 million liters of wine to 24 countries, this volume has remained unchanged for the last five years.

In terms of structure, there are two core channels: 1) a value channel that is dominated by five industrial wine producers and imported wines, representing 90 percent of the volume and 75 percent of the value of the Serbian wine market; and 2) a quality channel consisting of seven medium-sized and 37 small wineries that represent the most dynamic part of the wine value chain.

We envision that by 2020 the quality of Serbian wines will be much improved, the domestic market share of Serbian wines will have increased from 40 percent to 75 percent in volume terms (that is, an increase of 12 million liters), and the quality-focused wineries will have increased their exports to 2 million liters per year. The strategy to realize this vision has five complementary components. In order of decreasing importance, these components follow. First, the biggest impact can be achieved by facilitating foreign direct investment in one or more of the struggling industrial wineries, as these agribusinesses cater to the largest segment of the wine market where the greatest opportunities exist for import substitution. Second,

Serbian wines would benefit greatly from an improved image and greater consumer knowledge; hence, a national promotion/marketing campaign for Serbian wines would have a big pay-off. Third, improving good agricultural practices linked to contract production at the grape grower level are essential to providing the foundation on which the Serbian wine industry can be built. Fourth, improvements in wine quality and marketing strategy will allow small wineries to upgrade and penetrate high-end markets. Fifth, although essentially not constrained in terms of resources, medium-sized wineries should be supported in their image building as they will spearhead building Serbia's reputation as a country where high-quality wines are produced. Specific programmatic actions for each of these strategy components are presented in this report.

TABLE GRAPE VALUE CHAIN

There are opportunities to grow the table grape subsector in Serbia from its current small base (7,000 metric tons) by displacing a portion of the 12,000 metric tons in imports. Although increasing, exports of Serbian table grapes are small (450 metric tons) and mostly limited to the peak season. The main opportunities are currently in the domestic market.

The table grape value chain in Serbia is relatively simple in structure. Basically, there are two largely separated channels in the Serbian table grape value chain: a modern imported grapes channel and a fragmented, seasonal domestic grapes channel.

Unlocking the development potential of the table grape value chain will require fundamental structural changes at the grower level. The core strategy for growing the table grape value chain consists of 1) improved, long-term relations with leading fresh fruits distributors and supermarkets in Serbia (the main objective and starting point); 2) improved business service provision to the growers; and 3) collective action at the grower level through high-capacity marketing cooperatives (main area of intervention). We propose the implementation of a demonstration model that would provide a proof of concept (including a feasibility study) for linking a grape growers association via a modern distributor to modern retailers and off-season markets.

1. INTRODUCTION

1.1 OBJECTIVE OF THE STUDY

The U.S. Agency for International Development (USAID) Serbia Agribusiness Program aims to increase sales and employment in Serbia's agribusiness sectors by increasing their competitiveness and by strengthening the enabling environment in which they operate. The project assists six subsectors: berries, dairy, livestock, herbs-mushrooms-spices, tree fruits, and vegetables. The grape subsector is considered a potential seventh subsector to be targeted by the program because it appears to have excellent market prospects, potentially competitive producers, opportunities for growth, and entry points for effective program interventions.

This study aims to achieve three objectives: 1) provide a more detailed analysis of the grape value chain in Serbia, identifying key strategic issues constraining growth; 2) develop a vision and a competitiveness strategy for the grape (and wine) value chain; and 3) draft an initial grape commodity development plan based on the analysis and strategy, with suggested program interventions.

The study follows USAID's value chain analysis methodology and is based on secondary and primary information. In terms of secondary information, this report relies heavily on two recent assessments of Serbia's grape/wine subsector (Dixon and Dimitrijevic, 2009 and USDA/FAS, 2008), which add to this report a stronger emphasis on market analysis, strategy development, and commodity development plan design. The primary information is based on key informant interviews with farmers, winemakers, wine importers and distributors, government officials, and other stakeholders in the grape value chain. While we do present some official statistics in the report, these numbers are not considered reflective of the actual situation, with the exception of trade statistics. Rather, we estimated most of the dimensions of the value chain (production, sales, distribution, and average prices) almost exclusively from key informant interviews. We triangulated wherever possible and strived for internal consistency of the estimates. Most of the numbers in this report thus reflect our best estimated rather than any published industry or government statistics. Field visits to research stations, farms, processing facilities, and retail outlets further helped complete the picture. Data were collected from October to November 2009.

1.2 STUDY FOCUS AND ECONOMIC RELEVANCE OF GRAPES IN SERBIA

The value chains for table grapes and wine grapes are largely separated. They relate to different varieties of grapes, different cultivation techniques, and obviously different levels of processing and value addition. Grape production in Serbia is mostly related to wine production, and far less to table grape production. Only around 7 percent of total commercial grape production consists of table grapes (around 7,000 metric tons [MT] out of 95,000 MT).

Therefore, although there are good market opportunities for both table grapes and wine, this report will mostly focus on the wine value chain since it offers the initial prospect of greater impact. Apart from table grapes and wine, planting material represents a third key product with promising market opportunities from this subsector (see Dixon and Dimitrijevic, 2009).

Blessed with ideal agro-climatic conditions for grape production, Serbia has a long and distinguished history of viticulture¹ and winemaking, dating back to pre-Roman times (Dixon and Dimitrijevic, 2009). Since the Second World War, however, this subsector suffered from an industrial winemaking model imposed during the communist period. During the 1990s, a period which witnessed the greatest leap in the modernization of winemaking globally, there was no investment in Serbia's wine subsector as the country suffered from wars and an embargo. As a result, Serbia's traditional competence to produce quality wine was lost. The acreage under production dropped from a peak of 100,000ha to an estimated 16,000ha today.² A decrease in productivity further reduced the supply of domestic wine grapes and wine.

However, since 2000, some vineyards and winemakers have made a rebound. These include some of the large privatized former state-winemakers that produce mostly at the low end of the price range, as well as some smaller and medium-sized winemakers who make wines at the high end of the market. Generally, however, Serbian wine makers are not meeting domestic demand in terms of volumes, value, and image, and hence imports of bottled wine, bulk wine, and wine grapes represent 50 percent of the wine consumption in Serbia. If gaps in wine-grape production, operational efficiency, winemaking, product development skills, and effective marketing strategies, can be addressed, there is an opportunity for Serbian winemakers to displace a significant portion of the \$42.5 million in wine imports (2008 cost insurance freight [CIF] value), or roughly double this value (\$80 to 90 million) in retail terms.

¹ Viticulture is the production of grapes for winemaking.

² This is our estimate based on key informant interviews and it differs significantly from the official government statistic of 60,000 ha. This is discussed in detail in section 2.1.1.

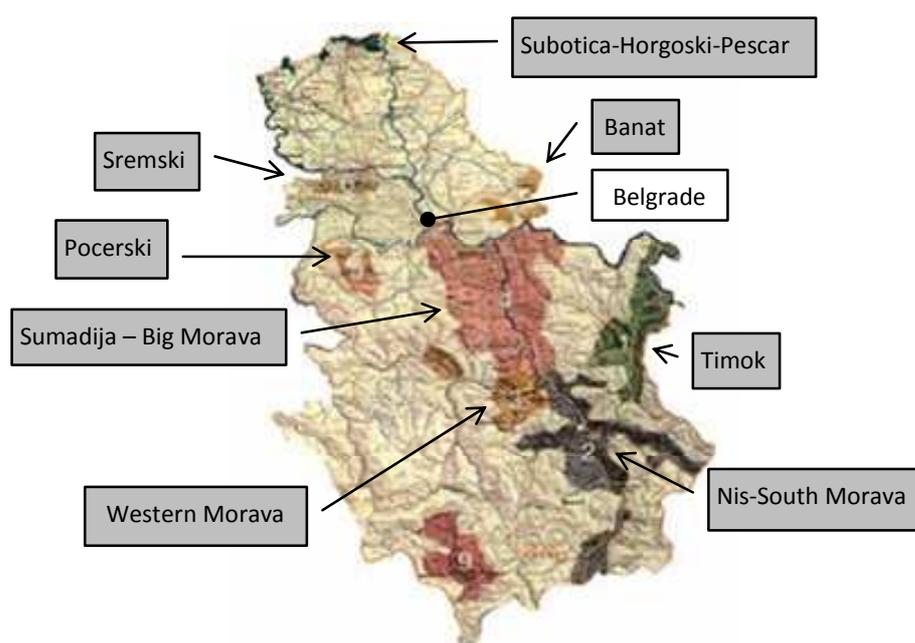
2. WINE GRAPES

2.1 GRAPE AND WINE PRODUCTION AND TRADE IN SERBIA

2.1.1. PRODUCTION

There are eight viticulture regions in Serbia (Figure 1), growing a wide range of wine grape varieties, including indigenous varieties such as Tamjanika and Prokupac. Most of the large and medium-sized wineries are located in central and north Serbia, which puts the wine-grape growers in the poorer areas in the south and east of Serbia at a disadvantage (e.g., in Nis or Timok); while these areas have great potential and availability of land suitable for vineyards, they are more isolated and suffer from population emigration. They represent the rural areas of Serbia with the least number of vineyards established or revitalized in recent years.

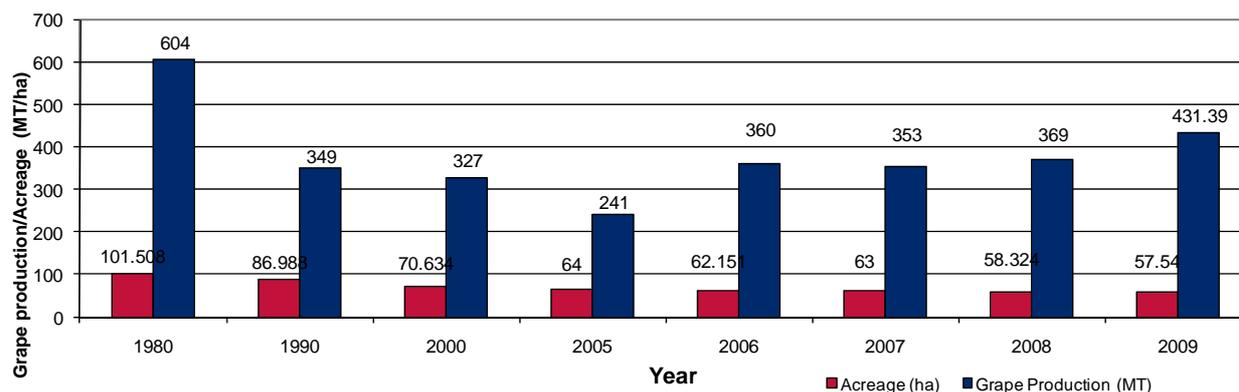
FIGURE 1: SERBIA'S VITICULTURE REGIONS



According to official statistics, there are some 60,000 ha under viticulture, producing 360,000 MT of grapes (6MT/ha) or 154 to 210 million liters of wine, depending on the season (Figure 2 and Table 1). However, this number is not based on actual measurement; rather, it relates to historical data on vineyards that have largely been abandoned. Based on key informant interviews, the actual area under wine grapes is estimated between 12,000 and 20,000 ha. We'll assume 16,000 ha as our best estimate in this report. Most of these vineyards are over 18 years old, that is, beyond their optimum productive age. In addition,

some 2,000 ha have been planted in the last five years, mostly in the Sremski and Western Morava regions, and are not yet productive (Figure 3). Figure 3 also indicates that after three years of growth, new plantings fell back in 2009, mostly reflecting the unreliable implementation of a government subsidy program. Given this, we estimate that yields are not more than 5.5 MT per ha on average. This implies an average production of 88,000 MT of grapes or 48 million liters of wine.

FIGURE 2: VINEYARD AREA AND GRAPE PRODUCTION, 1980–2009



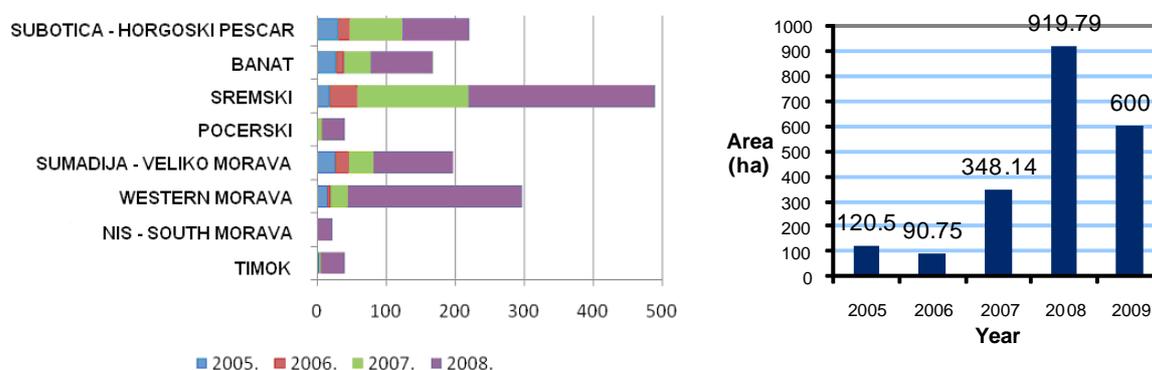
Source: Statistical Office of the Republic of Serbia

TABLE 1: WINE GRAPE AND WINE PRODUCTION TREND, 1980–2009

	1980	1990	2000	2005	2006	2007	2008	2009
Acreage (ha)	101,508	86,988	70,634	64,000	62,151	63,000	58,324	57,540
Grape Production (MT)	604,000	349,000	327,000	241,000	360,000	353,000	369,000	431,390

Source: Ministry of Agriculture, Forestry and Water Management and Statistical Office of the Republic of Serbia

FIGURE 3: NEW VINEYARD PLANTING IN SERBIA, 2005–2009



Source: Ministry of Agriculture, Forestry & Water Management. 2009 new planting distribution by area not available.

A host of other issues have plagued the wine grape growing business in Serbia. In recent years in certain regions (Zupa, Nis), vineyards suffered from vine yellows disease, which is spread by cicadas (flying insects) and results in desiccated vines. Other negative factors include high establishment, maintenance, and production costs; lack of certified planting materials; grape varieties that do not match agro-climatic conditions or market demand; vineyards too small to be worked efficiently; high competition from Macedonian grapes/wine on the domestic market; lack of workforce for agricultural work (pruning, harvest, etc); delayed subsidies resulting in a loss of trust in the government by farmers; and a lack of knowledge that is related to the age of the farmers and the absence of effective extension services (especially related to fertilization, disease diagnosis, and the latest technologies).

2.1.2 TRADE

Table 2 provides an overview of the trade data. Several aspects can be pointed out. First, imports of bottled and bulk wine have increased, especially in value terms. While the combined volume of bulk and bottled wine imports increased from 20 million liters in 2004 to a peak of 30 million in 2007 and then fell back to 24 million in 2008 (19 percent increase between 2004 and 2008), the combined value increased year to year from US\$18 million to US\$41 million over the same time period (128 percent increase). This mostly reflects both more aggressively addressing a growth in demand for wine and imports replacing local wines, especially for the mid-level price ranges. Dominant in these imports are Macedonian (Tikves) and Montenegro (Plantaze) wines that are not subject to import duties (due to the Central European Free Trade Agreement [CEFTA]). Second, the share of bulk wine in overall wine imports decreased from 30 to 20 percent in value terms between 2004 and 2008. This change is mostly because bottled wine imports have increased much faster in value terms than bulk wine (160 percent versus 54 percent). Large exports of bulk wine (and wine grapes) from Macedonia to Serbia for bottling reflect the industrial organization that was present in former Yugoslavia. This historical structure is now dissipating. Third, exports of bottled wine have remained constant in volume terms, but have increased with 40 percent in value terms over from 2004 to 2008³. This reflects a rather poor performance by Serbian wineries relative to the wineries behind the bottled wine imports into Serbia, which, as indicated, increased 160 percent over the same period. There are no significant exports of bulk wine from Serbia. Fourth, but left out of the table here, imports of grape concentrate and grape must have increased, but volumes and values remain marginal in the overall picture (less than US\$300,000 per year). Also left out of the table are imports of fresh grapes for processing into wine. These are more significant, at US\$1.5 million (2,600 MT) in 2008.

TABLE 2: SERBIAN WINE IMPORTS AND EXPORTS, 2004–2008

	2004	2005	2006	2007	2008	Growth
Values (US\$ million)						
Bulk wine import	5.4	4.7	7.6	9.5	8.3	54%
Bottled wine import	12.5	12.6	20.3	28	32.5	160%
Total Import	17.9	17.3	27.9	37.5	40.8	128%
Total Export	9.4	10.2	9.1	12.1	13.2	40%

³ More detail on these exports is provided in section 2.2.2.

	2004	2005	2006	2007	2008	Growth
Volume (million liters)						
Bulk wine import	10.0	9.2	15.7	16.5	11.7	17%
Bottled wine import	10.4	10.7	11.4	13.8	12.6	21%
Total Import	20.4	19.9	27.1	30.3	24.3	19%
Total Export	9.6	8.9	8.4	9.1	9.1	-5%

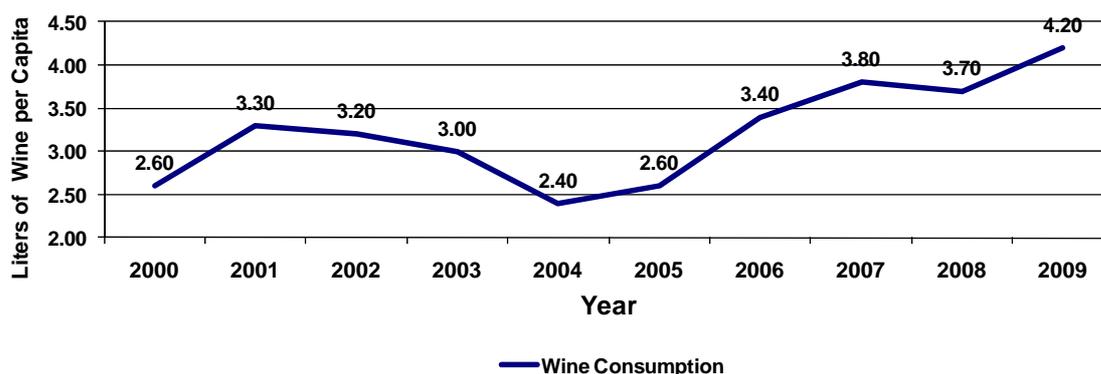
Source: Serbian Chamber of Commerce.

2.2 END-MARKETS FOR SERBIAN WINES

2.2.1 THE DOMESTIC MARKET

Both in terms of current sales volume and growth potential, the domestic market currently represents the most critical market for Serbian wines. In the absence of reliable historical data related to annual production and end-stock levels, we cannot provide any hard data on supply trends. Per capita consumption data indicate that there is a dramatic growth in wine consumption since 2004: from 2.4 liter to 4.2 liter per year per person (Figure 4). That would imply a growth of the overall market from 18 million to 31 million liter annually (assuming a population of 7.4 million).

FIGURE 4: PER CAPITA WINE CONSUMPTION IN SERBIA, 2000–2008



Source: Ministry of Agriculture, Forestry and Water Management and authors' estimations.

Key informant interviews indicated that at the level of the industrial wine makers, production and, even more so, sales are decreasing, resulting in expanding stocks. At the level of the small and medium-sized wineries, a strong growth of production, sales, and stocks has been recorded over the last several years, although this growth has slowed down due to the economic crisis. It is evident that the industrial-scale wineries are facing the toughest challenges in terms of investment shortages, decreased sales, and increasing stocks. Our best estimate, based on extensive key informant interviews is that the size of the Serbian wine market is around 34 million liters in volume terms and US\$140 million in retail value terms.

Of those 34 million liters, at least 13 million (40 percent) are imported⁴. We estimate that imports represent at least 50 percent of the volume of the Serbian wine market.

The wine market in Serbia, as in most countries, is highly differentiated, offering a wide range of products. Hypermarkets and cash and carry stores offer the broadest wine selection. To segment the market in a meaningful way for this study, we used price ranges within which consumers are assumed to make selections. We distinguished the following five categories (with an indication of the retail price range per liter and our best estimates for the share of the market in volume and value terms⁵):

1. Low-End Segment – Less than RSD150 – 20 percent of sales – 45 percent of volume:

This is a range for consumers almost exclusively concerned with price. This includes most of the wines sold in bulk, some of it in unlabeled bottles directly by wineries to nearby consumers. It also includes the lower ranges of wines from Rubin, Navip, and Vrsacki Vinogradi (Serbia), which dominate this segment, as well as some other local and imported wines. The latter include wines packaged in plastic bottles, 5 liter glass bottles (Italy – RSD1,008, so RSD150/750ml bottle”), and 1 liter and 2 liter tetra-packed wine in (Zupa winery, Serbia).

2. Low Mid-Range Segment - RSD150-300 – 30 percent of sales - 30 percent of volume:

This represents a range of wines for consumers looking for a good value, that is, good quality for a reasonable price. Here we find the mid-range wines of Rubin, Tikves, and Plantaze, as well as a range of imported and local wine brands. Tikves, and Plantaze dominate this segment.

3. High Mid-Range Segment - RSD300-500 – 20 percent of sales - 15 percent of volume:

These are wines for a higher income consumer or a consumer for whom wine is a more valued drink and who is willing to pay a higher price, but who nevertheless is still looking for a good value proposition. Here we find the higher-end ranges of Rubin, Tikves, and Plantaze, as well as a broad range of imported and local wine brands. Again, Tikves, and Plantaze are the dominant brands.

4. High-End Segment - RSD500-1,000 – 20 percent of sales – 8 percent of volume:

In this price range, Serbian products start to become dominant, but this is a very fragmented segment, with no dominant wineries. Plantaze has some wines in this range. Most of the wines of Serbia’s smaller wineries market in this range. This is also where we find the entry-level products of Serbia’s medium-sized wineries, who are the quality leaders amongst the local wineries.

5. Premium Segment - More than RSD1,000 – 10 percent of sales – less than 2 percent of volume:

This represents a limited selection mostly of imported wines but also the top products for the three quality-leading wineries in Serbia (Aleksandrovic, Radovanovic, Kovacevic) catering to consumers for whom price is not a constraint.

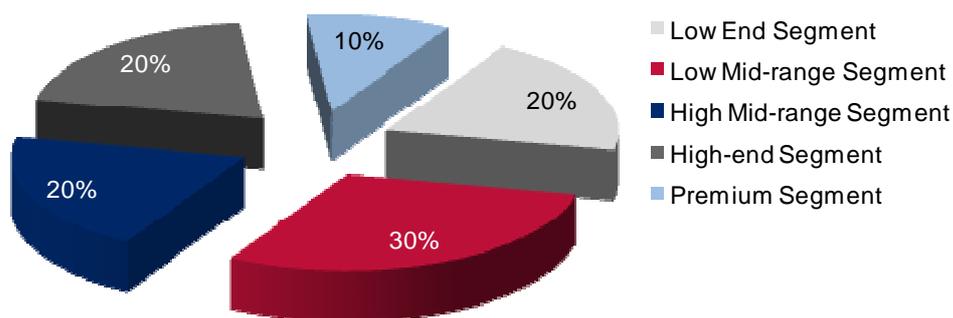
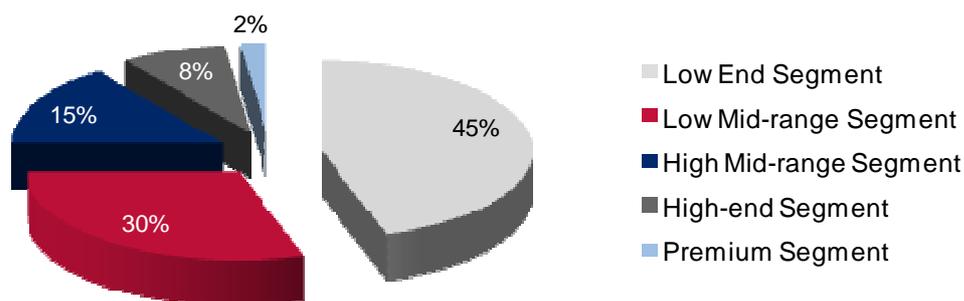
⁴ These are the bottled wine volumes that are imported for sale in Serbia and assumed to be sold in the same year. We do not know how much of the imported bulk wine is re-exported or goes into stock. If all the imported bulk wine would be sold in the domestic market, then 24,000 million liters of imported wine would have been sold in Serbia in 2008 (75 percent of the market).

⁵ In the absence of secondary data, this market share represents a rough estimation made by the authors based on key informant data and takes into account the market shares of the different retail outlets.

In summary, 75 percent of the volume and 50 percent of the value of wine sold in Serbia are in the below RSD300 retail price range. Serbian wines are present in each market segment, but they dominate only in the low- and high-end segments. In the mid-range price segments, Serbian wineries have a hard time matching the quality of imported wines. In the premium price segments, Serbian wines are overpriced relative to an imported product of similar quality.

FIGURE 5: THE SERBIAN WINE MARKET BY SEGMENT, 2009

Serbian Wine Market by Volume, 2009



Serbian Wine Market by Value, 2009

Source: authors' estimations

2.2.2 EXPORT MARKETS

Table 3 provides an overview of the 11 currently most imported export markets for Serbia wine, ranked from largest to smallest in terms of 2008 export value. Serbian wine was exported to 13 other markets in 2008, but values exported to each of those markets were less than US\$100,000. Export markets for Serbian wine can be divided into regional and non-regional markets.

TABLE 3: SERBIAN WINE EXPORT PER COUNTRY, 2006–2008

Country	Unit	2006	2007	2008	Growth Rate
Bosnia and Herzegovina	CIF Value (US\$)	5,727,500	7,195,800	7,372,400	29%
	Volume (Lit)	4,667,438	5,181,227	4,616,974	-1%
	Price (US\$/Lit)	1.23	1.39	1.60	30%
Montenegro	CIF Value (US\$)	1,346,300	2,424,800	2,382,900	77%
	Volume (Lit)	1,033,067	1,522,254	1,455,405	41%
	Price (US\$/Lit)	1.30	1.59	1.64	26%
Russian	CIF Value (US\$)	79,400	401,300	998,500	1158%
	Volume (Lit)	43,257	263,011	1,156,351	2573%
	Price (US\$/Lit)	1.84	1.53	0.86	-53%
Croatia	CIF Value (US\$)	256,600	386,200	436,500	70%
	Volume (Lit)	147,588	200,376	212,334	44%
	Price (US\$/Lit)	1.74	1.93	2.06	18%
Germany	CIF Value (US\$)	647,800	592,800	396,700	-39%
	Volume (Lit)	1,449,822	1,316,056	543,847	-62%
	Price (US\$/Lit)	0.45	0.45	0.73	63%
Macedonia	CIF Value (US\$)	124,900	164,800	231,300	85%
	Volume (Lit)	103,746	150,167	228,109	120%
	Price (US\$/Lit)	1.20	1.10	1.01	-16%
Slovenia	CIF Value (US\$)	23,300	82,200	186,800	702%
	Volume (Lit)	11,570	35,905	170,942	1377%
	Price (US\$/Lit)	2.01	2.29	1.09	-46%
Canada	CIF Value (US\$)	144,700	141,300	186,000	29%
	Volume (Lit)	98,658	90,960	120,693	22%
	Price (US\$/Lit)	1.47	1.55	1.54	5%
Switzerland	CIF Value (US\$)	143,100	184,400	163,300	14%
	Volume (Lit)	55,451	68,866	56,400	2%
	Price (US\$/Lit)	2.58	2.68	2.90	12%
Austria	CIF Value (US\$)	154,000	37,000	153,000	-1%
	Volume (Lit)	410,000	33,000	318,000	-22%
	Price (US\$/Lit)	0.38	1.12	0.48	28%
France	CIF Value (US\$)	99,200	96,600	115,500	16%
	Volume (Lit)	60,216	52,636	59,367	-1%
	Price (US\$/Lit)	1.65	1.84	1.95	18%
Aggregate for the 11 countries	CIF Value (US\$)	8,746,800	11,707,200	12,622,900	44%
	Volume (Lit)	8,080,813	8,914,458	8,938,422	11%
	Price (US\$/Lit)	1.08	1.31	1.41	30%

Source: Serbian Chamber of Commerce

Markets in the Region

In part based on historic trade patterns within the former Yugoslavia, Serbia exports significant volumes of wine to two markets in the region: Bosnia-Herzegovina and Montenegro. Combined, these two markets represent 77 percent of exports in 2008. Other markets of current significance for Serbia in the region are all former Yugoslavia markets: Croatia, Macedonia, and Slovenia. Around 84 percent of Serbian wine exports remain within the borders of the former Yugoslavia. There are no exports to other CEFTA

countries. Mostly these exports relate to low-end wines produced by the industrial winemakers, although a small fraction of the export comes from the medium-sized wineries.

When we look at wine markets in the region, one other aspect is the increasingly regional nature of the supermarkets' procurement systems (and other modern retail formats such as cash and carry). These represent both a challenge (facilitating imports) and an opportunity (facilitating exports). Foreign chains already make up five of the seven main supermarket chains and account for 50 percent of the supermarket sector turnover. Mercator has a presence in Slovenia (its home market), Croatia, Bosnia-Herzegovina, and Macedonia. Konzum has outlets in Croatia (its home market), Serbia, and Bosnia-Herzegovina. Delta has stores in Serbia, Macedonia, Montenegro, Bosnia-Herzegovina, and Bulgaria. The international chain Metro has build up a presence in the region by opening stores in Slovakia, Croatia, Serbia, Bulgaria, Hungary, Romania, Moldova and Ukraine. Serbian retail chains (Delta) are more likely to promote Serbian wines, whereas foreign chains (Konzum, Mercator) are more likely to promote imported wines. However, in the end these retailers will be driven by the bottom line and sell those wines that maximize their profitability, no matter where the wines originate.

Nonregional Markets (European Union [EU], Russian Federation, United States, China)

These markets are generally very competitive, especially with the offering of “New World” wines from the United States, Chile, Australia, and South Africa⁶. In the EU, the wine regulation adopted in 2008 will increase the competitiveness of EU producers through stimuli that will lead to the departure of noncompetitive producers and the modernization of those who are more competitive. There, the new labeling rules will allow producers to use labels that are in line with the “New World” wine labels, for example, on grape variety indication⁷. Quality to price ratio in these markets are high. In addition, promotion is vital to make it in these markets and participation in key wine fairs such as ProWein or London International is important. Governments of countries competing in these markets often provide support for these promotional efforts. For example, the German Wine Institute is spending €1.5 million to promote Riesling in the U.S. market (with, for example, a Riesling week in key urban markets). In Hungary, the government levies a tax of \$0.03 per bottle that will be used to fund marketing campaigns for Hungarian wines.

Serbia currently does not really have products that can truly compete on these markets (low-priced wines are of too low quality; high-quality wines are priced too high). Neither is there any government funding available that could finance the required promotional effort. However, these markets are important—especially for the high-end winemakers where winning medals in international taste competitions or getting on the wine list of a fancy hotel such as the Four Seasons in New York City—can support quality and reputation improvements that would support the low-volume, high-quality, high-price strategies followed by the medium-sized wineries in Serbia.

Nevertheless, there are some markets where wines from Serbia may have some competitive advantages. One example is the Serbian diaspora markets that could be targeted with a range of wines from Serbia (these markets include New York, Chicago, California, and Florida in the United States; Toronto in Canada; and certain regions in Austria, Germany, France, and Australia).

⁶ New World wines are characterized by a more alcoholic, fruitier, and full-bodied nature, clear indication of grape varieties including blends, strong non-geographic brand development, and large volume-low price strategies.

⁷ The implications for the Serbian wine industry of joining the EU are discussed in section 2.4.1.

Another option is using markets such as Germany and Austria that currently import bulk wines from Macedonia and may be interested in diversifying their supply base to a regional competitor. Currently, they import very cheap bulk wine from Serbia. Exports of wine from Serbia to these EU markets, could benefit from the added advantage that a certain quota of wine can be exported duty free under the Stabilization and Association Agreement between Serbia and the EU. This agreement cuts both ways though: while Serbia can export into the EU 5.3 million liters of bottled wine (in original packaging) and 1 million liters of bulk wine; the EU can export into Serbia 2.5 million liter of wine.

A third option is the Russian Federation, where Serbia enjoys a tariff free and unlimited quota import regime for wine as part of the Free Trade Regime between the two countries⁸. Constraining this opportunity is that wine imports in Russia must go through a limited number of licensed importers. This is currently the only nonregional market that is already showing clear growth in recent years, with exports growing from less than US\$100,000 in 2006 to around \$1 million in 2008. This trend continued in 2009—one of Serbia industrial wineries indicated that their wine exports to Russia tripled in 2009. It appears, however, that along with this growth, the value of the wine itself is going down, indicating that lower-quality bottled (or tetra pack) wines or bulk wines are increasing their share.

Other markets deserving attention, especially for Serbia's top quality wines, are China, Switzerland, and France. China is a newly emerging wine market growing at around 7 percent annually and offering many interesting opportunities, even though its own wine industry is emerging strongly as well and currently supplies around 80 percent of domestic demand. Consumers are brand conscious, so developing and promoting a quality brand will be essential. Fortified wines make up two-thirds of the market. Switzerland and France are currently importing (small volumes of) Serbian wines at higher average prices, indicating an interest in higher quality wines from Serbia. As nonregional markets become more important, the Serbian industry will need to track market development trends in target markets through intelligence sources such as www.winebusiness.com, www.winemarketer.com, www.wine-business-international.com, and www.decanter.com. These will provide insights on the latest trends on varietal preferences of consumers (such as, the rising popularity of rose and white Zinfandel, or the erosion of the red wine market share toward lighter, sweeter wines from which sparkling wine benefited), trends in packaging (such as the emergence of the screw cap), and so on.

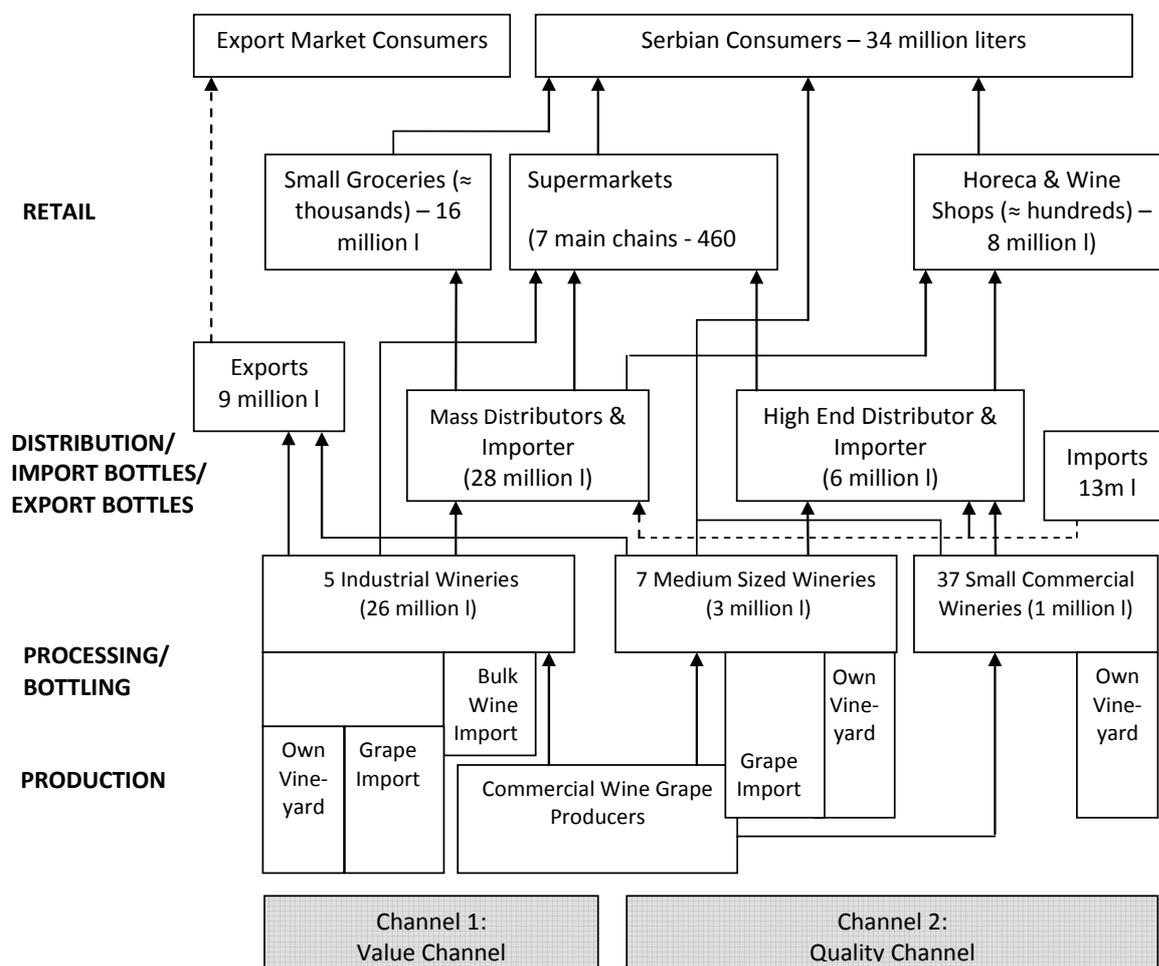
2.3 THE WINE GRAPE VALUE CHAIN

2.3.1 VALUE CHAIN MAP

In our value chain map (Figure 6), we only include commercial agents that consistently produce wine for the market. A significant, but not quantified volume of wine is produced at the household level for household consumption or sale to neighbors in unlabeled containers and variable volumes. Some wineries may sell a labeled bottle one year, but not the next. These winemakers may become commercial at some point, but are currently left out of this map. We distinguish two channels in the Serbian wine value chain: a value channel and a quality channel.

⁸ Sparkling wines and distillates such as cognac are exceptions and are subject to import duties.

FIGURE 6: THE WINE VALUE CHAIN IN SERBIA⁹



The **value channel** is dominated by five industrial producers, the surviving privatized wineries of the communist era, and by key imported brands, Tikves and Plantaze (which combine for 70 percent of wine imports in value terms). As such, this segment is linked to trade on both the input side (grape, must, wine imports) and the market side (regional exports). Mostly these wines are sold through small traditional shops, but supermarkets and cash and carry operators are gaining market share. The strategic focus is on achieving the best quality within the lower price ranges. It is by far the largest channel, representing 90 percent of the volume and 75 percent of the value of wine sold in Serbia. The current dynamic in this channel is that imports are displacing sales from the struggling industrial wineries.

The **quality channel** consists mostly of Serbian wineries of various sizes (7 medium-sized, 37 small wineries). These wineries compete on quality and uniqueness in a currently less competitive environment.

⁹ The map only reflects wine volumes and excludes the estimated 8 million liters of wine distillate (“Vinjak” – cognac) that is produced by the industrial wineries and sold both locally and in export markets.

Volumes supplied are low relative to demand, and winemakers can generally sell their production with relative ease, especially the top-quality producers. A plethora of wines is imported to compete in this segment. These wines mostly sell their wines through hotels, restaurants, and catering (HoReCa), and to a far lesser degree through wine shops and direct sales from the winery. The latter is largely linked to the tourism industry. Recently, supermarkets have increased their offerings of these wines. This is the smaller channel of the two, representing 10 percent of the volume and 25 percent of the value of the market. At the same time, this is the most dynamic channel, characterized by fast growth over the last five years. But this growth will likely taper off, reaching a plateau over the next five years as wineries hit the size boundaries of family businesses and market segments.

These two channels supply an estimated 34 million liters of wine to the Serbian wine market, valued at \$140 million in retail prices. Imports of bottled wine are \$33 million in wholesale prices. More than 70 percent of these imports are from Montenegro and Macedonia. In addition, there are imports of bulk wine (\$8 million) and wine grapes (\$1.5 million) from Macedonia. The total imported value related to wine is \$42.5 million. Exports are 9 million liters or \$13 million (at an average of \$1.5/liter in free on board [FOB] terms). Wine used for distillation is not included in Figure 5.

2.3.2 INPUT SUPPLY AND TECHNOLOGY GENERATION

There are two main technology and input issues. The first is that, even though there are some 300 firms involved in the production and trade of vine-planting material, there is an insufficient production of certified planting material (about one third of total is certified), especially for indigenous varieties. In 2008, total domestic production stood at 4 million plants, one-tenth the production volumes of the 1990s when Serbia was an exporter of planting materials. Imports have displaced local production. Competition is mainly on price, making this a less profitable industry. Adding to the problem are 1) the inadequate phytosanitary inspections of imported production materials, and 2) difficulties in acquiring basic planting materials of licensed varieties. The latter is driven by the business strategies of the foreign suppliers who prefer to sell the finished retail product. As quality wine-grape production increases, with the right development strategies, there will be clear opportunities for vine planting material production in Serbia. In fact, the growth of the two industries goes hand in hand. The Government of Serbia's 2008 revised subsidy program gives preference to domestic certified planting material over imported; it will help stimulate the development of the vine planting material industry. In addition, there is increased demand for planting material from the Russian Federation, which has embarked on a strategy to displace large imports of wine from Moldova and Georgia with domestic production. In 2008, Serbia started to benefit from this development, but this opportunity is uncertain as it depends on the vacillating policies of the Government of the Russian Federation.

The second issue is that although there is a good research program on viticulture and winemaking, the extension system (either governmental or private sector) to transfer the developed technologies to the stakeholders in the wine value chain is largely missing. There is no on-farm research program. This is especially problematic since throughout the value chain, stakeholders' knowledge of modern techniques is limited.

2.3.3 GRAPE PRODUCTION AND HARVEST

We distinguish four types of vineyards: 1) small family vineyards of 0.1-0.3ha that are not for commercial production—they are left out of this analysis; 2) small to medium-sized vineyards that belong to wine-grape growers whose focus is on grape production for the commercial wineries—some organized in a

cooperative, a few contract growers; 3) modern small-medium vineyards that belong to the wine-makers (integrated firms); and 4) largely older large vineyards of up to 1,400ha (Vrsacki Vinogradi) that belong to the industrial wineries. There are an estimated 70,000 farmers with vineyards across these four types. The number of commercial grape vineyards in Serbia is not known, but can very roughly be estimated at being between 6,000 and 24,000.

The current grape production base in Serbia is weak. Vineyards were largely abandoned and most of the remaining vineyards, including the large vineyards of the industrial wineries, are more than 18 years old, and thus passed their peak. Most vineyards are small (between 0.25-1.5 ha) and scattered, used largely for individual production. There is a problem with plant disease (vine yellows), and plant protection and inspection are ineffective. Irrigation is largely absent in vineyards and methods for vineyards management, including fertilization, are outdated. The necessary mechanization for efficient, high-quality grape growing and processing is missing or obsolete in most cases. In addition, the cost of establishing a vineyard in Serbia is high, at US\$42,000/ha to get to a vineyard to productivity—three years (Table 4). In combination with a higher labor cost, the above factors negatively influence the competitiveness of Serbian producers in relation to their counterparts in Macedonia.

Nevertheless, slowly but surely, wine grape production in Serbia is on the rebound in recent years with the acreage under wine grape vineyards increasing with on average 1,000 ha per year (5-10 percent growth). This is driven in part by increasing demand from the growing small and medium-sized wineries, and in part by a government subsidy program (which is discussed in greater detail in section 2.4.1).

TABLE 4: COST OF ESTABLISHING A GRAPE ORCHARD IN SERBIA

Sum of the expenses for establishing vineyard in US\$ for 1ha

EXPENSES	In USD per 1 ha
Soil preparation	7.405
Planting vine	10.550
Maintaining vineyard in the first year	2.453
Maintaining vineyard in the second year	2.364
Maintaining vineyard in the third year	2.578
Stands needed for 1 ha of vineyard	11.520
Regular production of grape-vineyard maintenance	4.981
TOTAL:	41.853

Sum. of expenses for 2,000 ha of new vineyards establishment in US\$

EXPENSES	In US\$ per 2,000 ha
Soil preparation	14,810,520
Planting vine	21,100,530
Maintaining vineyard in the first year	4,907,100
Maintaining vineyard in the second year	4,728,660
Maintaining vineyard in the third year	5,156,916
Stands needed for 1 ha of vineyard	19,866,320
Regular production of grape-vineyard maint.	9,962,900
TOTAL:	83,706,204

Source: Ministry of Agriculture, Forestry and Water Management and authors' estimations.

2.3.4 PROCESSING

There are three types of wineries in Serbia. First, there are five industrial/corporate producers who operate on a large scale with large vineyards, processing facilities, and storage rooms. These are the privatized former state enterprises, which were focused on quantity and price only. Quality was low. Most of these processors are still struggling with this inheritance, suffering from bureaucratic management, operational inefficiencies, and quality issues. Modern technologies and marketing strategies are largely absent. Navip, Coka, and Vrsacki Vinogradi, with a combined production of almost 10 million liters, are currently in the market for a new buyer. Their inventory has been increasing dramatically as sales are lagging. Rubin and Vino Zupa, each producing nearly 10 million liters per year, appear to be doing better. Rubin has developed a range of wines comparable in breadth to that of Plantaze or Tikves, but it has far less shelf presence and does not yet deliver the same quality for a given price. Vino Zupa has a popular wine that is packaged in various volumes of tetrapack and represents the lowest priced wine products in the Serbian market. As a group, these wineries also produce 8 million liters per year of “Vinjak” (cognac) distillate, with Rubin producing around 70 percent of this volume.

Second, there are seven medium-sized wineries that produce wines in the high-end and premium segments (RSD500 per liter and above). These wineries are WOW (World of Wine), Jovic Bora, Aleksandrovic, Radovanovic, Radenkovic-WINECO, Kovacevic, and Dibonis. All of them are family managed, but with some hired employees. There is some heterogeneity in this group. WOW, with an annual production of 1.6 million liters sticks out, but is still classified in this category because they did not descend from a state-owned winery. The firm is currently struggling to keep sales up with production as their strategy of larger-scale production and high prices backfired in the Serbian market. They recently slashed their prices dramatically, and sales have picked up as a result. While Jovic Bora produces 600,000 liter per year, the other five wineries in this group produce around 200,000 to 300,000 liter per year. Although the focus of the latter has been on quality, they are on a strong growth path. Their intentions are to grow to around 500,000 liters per year and then stay at this level, which they consider as the limit of a winery managed as a family business. Rather than increase scale, they would focus on increasing quality. The WOW case illustrates that there are clear growth limitations to these higher end segments, and thus to this group of wineries as a whole. If prices can be brought down, or quality and image further increase, these wines have some export potential that would facilitate growth. This group probably has the potential to grow from the current 3 million liters to about 5 million liters over the next five years. Although they currently only represent less than 10 percent of the market in volume terms, they represent an estimated 20 percent of the market in value terms.

Third, there are 37 small wineries, each producing a volume of 10,000 to 80,000 liter per year. Their combined output is estimated at around 1 million liters annually. These wineries are 100 percent family-run (no hired employees), quality focused, and just getting into commercial production and sales. A significant part of their production is of a slightly lower quality wine sold in bulk from the winery to customers in the region. The remainder, which they want to grow over time, consists of a higher quality wine packaged in labeled bottles aimed at the high-end segment of the market. Although some of these wineries may eventually join those in the second group above, most are unlikely to grow above 100,000 liters based on their own growth strategies and ambitions. Furthermore, they will feel tremendous competitive pressure from the two first groups and are unlikely to grow beyond certain niche segments in this heterogeneous wine market.

Across the three groups, all wineries are expanding their vineyards and are shifting away from a strong reliance on imported grapes or contract grape producers. Nevertheless, given the shortage of productive, high-quality vineyards, there is room for growth for contract grape growers in the foreseeable future.

In general, the Serbian winemaking industry suffers from numerous weaknesses. Most of the wines were not suitable for western markets due to inappropriate style, irrespective of their quality—for example, using large old oak barrels and not using controlled temperature fermentation takes the flavor in a direction that goes against the market. Equipment is outdated and there are no resources to upgrade equipment and to improve winery operation and its efficiency. Adoption of modern techniques, technologies, and equipment is rare. There is no recovery of value from winery wastes, nor is there a waste management system in place in most of the wineries. Most wineries are not following declared ISO 9000 and HACCP certifications closely and there is no independent auditing service. There is no continual education and access to foreign journals and books is severely limited. Very few Serbian wineries are exposed to in-demand wine styles at international expos.

2.3.5 WHOLESALE AND RETAIL DISTRIBUTION

Almost all wine, whether imported or Serbian, reaches the retailer sector through wholesalers, rather than directly from the winery. Direct sales to the consumer from the winery are one notable exception but these only represent an estimated 2 percent of commercial wine sales in Serbia. Another notable exception is the direct sales by the large industrial wineries to modern retailers (supermarkets, cash and carry). Most wholesalers are also importers. There are two types of wholesalers: mass distributors and high-end distributors. Mass distributors sell wine to the numerous small retail shops and HoReCa outlets that still dominate retailing in Serbia. Most of them are regional in nature. They have a strong bargaining position in the value chain as they are the gatekeepers to a highly fragmented retail market. Their position is undermined though by the shift of HoReCa establishments to the cash and carry operations (notwithstanding the HoReCa's desire for doorstep delivery and supplier credit). High-end distributors sell the more expensive wines, including those produced by small and medium-sized Serbian wineries, to fancier restaurants, hotels, and wine shops. Both types sell to supermarkets. Technically, cash and carry operations are wholesale operations, but because they get most of their wine from the listed wholesalers and also sell directly to the consumer. We classify them here with the retail operators.

Serbian consumers buy wine through four channels: small traditional shops (46 percent of sales in volume terms), supermarkets (28 percent), HoReCa (24 percent), and directly from wineries (2 percent). Supermarkets in Serbia are growing at 20 percent per year (Neven and Ducic-Savic 2007) and they are rapidly increasing their share of the wine market in Serbia. Even the lowest priced wines (such as tetra pack boxes from VINO ZUPA) and the most expensive local wines (such as those from Aleksandrovic or Radovanovic) are now available in supermarkets and cash and carry outlets.

2.4 SYSTEMIC CONSTRAINTS AND UPGRADING OPPORTUNITIES

2.4.1 RELATED TO THE BUSINESS ENABLING ENVIRONMENT

Several constraining elements relate to the environment in which stakeholders in the Serbian wine value chain have to operate.

First, there is a government support program for the wine industry, but it lacks long-term dedication and its impact appears to be limited. The support program aims to expand the total area under vineyards

before EU accession, which will (likely) preclude further expansion¹⁰. Investment subsidies, a key component of the program, are available for the establishment or modernization of new vineyards and for upgrading agricultural and winemaking equipment. The subsidies (US\$22,500/ha) are limited to vineyards between 0.3 and 10ha, favoring small and medium-sized wineries. These subsidies are supposed to stimulate the planting of 2,000 ha of new vineyards per year, perhaps an unrealistic objective. In reality, only 2,000 ha were planted in the five last years combined. Delayed subsidy payments leading to uncertainty and a lack of confidence on the growers' part appears to be the main culprit. Promotion subsidies are not part of the government support program, although are critical for the competitiveness of Serbian wines both in the domestic and in export markets.

Second, Serbia's pre-EU accession process presents some challenges for the country's wine industry. An open trade agreement with the EU implies increased competitive pressure at various price levels. This trade agreement allows for certain volumes of wine to be exported to and imported from the EU at zero duty. For sparkling and nonsparkling wines, these quotas are 6.3 million liter for export from Serbia to the EU, and 2.5 million liter for imports from the EU. Given that Serbia's wines do not currently offer a competitive value relative to EU wines, this represents a competitive pressure in the domestic market more than it represents an export opportunity. Also, entry into the EU will imply compliance with its labeling laws and regulations. Established EU wine labeling standard remains based on protected designations of origin. Still lacking the right regulatory framework and cadastre, this represents a challenge for the Serbian wine industry. Although a new wine law was passed recently, the regulatory reform process of translating this new law into the rulebooks has barely begun. The cadastre has not yet been fully implemented nationally either. To complete the cadastre an estimated US\$1 million and 2.5 years will be needed. However, there are insufficient technical and financial resources available at the Ministry of Agriculture (Department of Oenology and Viticulture) to complete both the rulebooks and cadastre in the near future, nor is there a long-term strategy or solution planned. In addition, this new system of geographic denomination will be very bureaucratic and costly for small producers and wineries, limiting their competitiveness. It would require some adjusting in this context.

2.4.2 RELATED TO VERTICAL AND HORIZONTAL LINKAGES AND VALUE CHAIN GOVERNANCE

In terms of vertical linkages, most relationships between grape producers and wineries are not based on contracts. There is no organized and well-developed grape market for wine grape production in Serbia, and contracts between growers and winemakers are rare. As a result, long-term relations between growers and winemakers are limited, which negatively influences wine quality and marketability. Medium-sized wineries now pay high prices for the small volumes of high-quality grapes available (for example, US\$0.75/kg of Cabernet Sauvignon). These are also the wineries keenest on using contracts.

One of the most essential changes required in the Serbian wine value chain is the expanded use of long-term contracts for wine grape supply. Mutually rewarding, legally binding contracts must be negotiated in advance between grape growers and wineries. These contracts need to take into account any regulatory requirements regarding land use and will form the basis for long-term relationship building related to high quality and fair prices for both parties. For growers, contracts help secure a market for their output, and for wineries they secure a supply of a quality wine grape product, customized to the specific needs of the

¹⁰ The new EU wine policy aims reduce the "wine lake" (surplus) and increase the competitiveness of EU winemakers by temporarily restricting further expansion of vineyards during a forced survival of the fittest period. This restriction may be lifted in 2015.

winery. These contracts should indicate practices to follow (pruning, harvesting, transport, and so on), quality standards to achieve, quantity to produce, price to sell at (based in part on lab analysis, with a minimum price), payment terms to comply with, cleanliness of the product, and so on. Quality relates to yield (5-9MT/ha), pest management practices, and agreed-upon ripeness measurements. Price can be set per metric ton or per hectare. In the latter case, the winemaker shares the risk with the grower (with a minimum cap) and risk is minimized (as is the profit potential). These contracts may be set up for a year or for multiple years. For example, contracts made with larger wineries with deeper pockets could provide or facilitate financing for planting blocks of new vineyards linked to 15-year contracts.

Horizontal linkages among grape-growers and winemaker associations are weak. There is an industry association, Udruženje Vinogradara i Vinara Srbije (Viticulturists and Winemakers Association of Serbia, VIVIS), established in 2008, that has recently (successfully) organized its first wine fair in Serbia. Although such an event helps to promote Serbian wines and facilitates interaction between various wineries, it is a far cry from realizing generic promotion campaigns aimed at improving the image and sale of Serbian wines in the market. Serbian wineries are very individualistic in nature and for the greater part do not have the financial resources to contribute to a joint industry promotion fund.

2.4.3 RELATED TO SUPPORT SERVICES

As follows from the above discussion, there is general lack of agribusiness development service providers in this industry. Extension services, whether private or public, are limited. The Government of Serbia's extension service does not have the resources to execute its mandate. Whatever extension services do exist, are largely ineffective, especially in terms of winemaking. Essential communication between industry and university research is nearly non-existent, and the applied research is insufficient. Laboratories for quality control and assurance lack resources. As a result, testing is limited and wait times for results are long. There is no systematic provision of relevant market research reports and related information, other than the mostly qualitative information available from a few Serbian wine magazines.

2.5. VISION AND STRATEGY FOR IMPROVED COMPETITIVENESS AND GROWTH

2.5.1 VISION

We envision that by 2020, there will be a much improved quality image of Serbian wine, especially at the lower price segments of the domestic market and in the export market, leading to displacement of grape, bulk wine, and bottled wine imports with local production. The market share of Serbian wine in the domestic retail market will have increased from 40 percent today to 75 percent by 2020 in volume terms. Imports of bulk wine and grapes will drop 50 percent, to 6 million liters annually, as they are replaced by local production. Small and medium-sized wineries become more value competitive and increase their sales from 4 million to 7 million liters, including 2 million liters in exports/tourism sales. As a result, the value chain captures \$50 million of extra income annually.

2.5.2 VALUE CHAIN COMPETITIVENESS STRATEGY

The strategy to realize the above vision will entail improvements in efficiency and quality to bring the Serbian offer in line with domestic, regional, and global value benchmarks, and, most importantly, a well-designed, well-financed, and sustained promotion campaign to differentiate Serbian wines from the rest. Having a good or even a great wine is not enough. The consumer has to build an emotional attachment to

the product through the “story” (and the people) with which it is associated. There will be a different focus at different locations in the value chain. We distinguish five complementary components in order of descending importance. First, the biggest impact can be achieved by facilitating foreign direct investment (FDI) in one or more of the struggling industrial wineries, as these agribusinesses cater to the largest segment of the wine market where the greatest opportunities exist for import substitution. Second, Serbian wines would benefit greatly from an improved image and greater consumer knowledge; hence, a national promotion/marketing campaign for Serbian wines would have a big pay-off. Third, improving good agricultural practices (GAP) linked to contract production at the grape grower level are essential to providing the foundation on which the Serbian wine industry can be built. Fourth, improvements in wine quality and marketing strategy will allow small wineries to upgrade and penetrate high-end markets. Fifth, although essentially not constrained in terms of resources, medium-sized wineries should be supported in their image building as they will spearhead building Serbia’s reputation as a country where high-quality wines are produced. The following describes each of these five components in greater detail.

Component 1. FDI – Strategic Partnerships at the Industrial Winery Level

Three of Serbia’s five industrial winemakers are struggling in operational, managerial, financial, and marketing terms. FDI-based partnerships with modern, well-capitalized global wineries interested in expanding in the Balkan region would bring not just the needed investment and working capital but also the latest know-how and network connections. These are large wineries, by European standards, and thus their size may be attractive for investors looking for a winery from where to launch New World wine strategies on the Old Continent. The winemaker and the Government of Serbia would have to collaborate on developing attractive investment packages (in terms of some subsidies, debt-forgiveness, liberty to reduce staff, and so on). This would build a large-volume supply of consistently good quality wine supported by an effective marketing strategy (brands) that will stimulate the expansion of the Serbian wine with products that can compete in the low-end and medium-range segment of the domestic and regional market, and most specifically can compete with the dominating Plantaze and Tikves brands. The initial focus should be on import substitution in the domestic market.

Component 2. Promotion – Develop Image, Consumer Knowledge of Wines, Wine Regions, and Indigenous Varieties

Spearheaded by the medium-sized wineries who are the quality leaders, but with the participation of all commercial wineries, Serbia should find its niche in the highly competitive global wine market by building its own unique story. This will include promoting regions that will be associated with the wines, foods, and touristic attractions of the region, and will include a heavy focus on indigenous grape varieties. Within this tapestry of wine regions, each winery will then integrate its specific story and products. These stories will help create the consumer’s emotional attachment to the product that will be critical to the challenging task of actually selling the wine. The current “Wine Routes of Serbia” booklet, developed by the National Tourism Organization of Serbia has taken an excellent initial step. Membership to the VIVIS should be required for entry into such literature in order to safeguard the collective reputation of Serbian wines in the various markets (see Castriota and Delmastro, 2009, for more detail).

Component 3. GAP at the Grape Grower Level – Expand/Build High-Quality Wine Grape Base

A sufficiently large wine grape base that produces the right varieties and quality levels is a condition *sine qua non* for any wine subsector that wants to grow and build a reputation for quality wines, especially since indigenous grape varieties will play a key role in the differentiation of the Serbian wine subsector. A

shift to production on a contract basis is essential. Investment subsidies and better access to credit (through vertical partnership with wineries) would help expand the aggregated wine grape orchard area. Improved and expanded local production of certified quality planting material for the varieties needed in the marketplace, will be needed to feed the required growth. Improved extension services, provided by the Government of Serbia or commercial BDS providers as well as other knowledge dissemination tools are required to improve GAP to established international standards.

Component 4. Small Wineries, Especially in Rural Areas – Improve Quality (Equipment, Knowledge) and Market Access

These small wineries will play a key role in creating an attractive diversified portfolio of high-quality Serbian wines, helping to build Serbia's reputation as a top-quality wine producer globally. To do so, they will need to shift entirely to the production of quality labeled wines in retail bottles (no bulk sales of lower quality). In turn, this will require improving quality consistently, developing styles that are in demand ("New World wines") within the confines of the (new) EU wine law, and gaining access to lead wholesalers, retailers, and exporters. Given the limited human resource and financial capital of these wineries, they must pool their resources (such as through a Small Wineries Association of Serbia) and collaborate with the medium-sized and industrial wineries on a generic Serbian wine promotion campaign (see Component 5).

Component 5. Image Building by Medium-Sized Wineries – International Competitions

For the medium-sized wineries to implement their quality-focused strategies successfully, they will need to improve quality continuously and strengthen the signals of such quality. In this context, improved winemaking skills and experience are required (a permanent drive to excel in terms of quality) and participation in and winning medals at top international wine fairs will be critical. Getting on the menu lists of famous top restaurants or hotels (such as the Four Seasons in New York City) and getting press reviews provide other avenues to build up a quality reputation. In turn, this implies access to a quality grape base and sales/marketing skills that will tell and sell the story of these top wineries in Serbia, and how they differentiate their wine from all the other wines in the local and export markets. Even as quality improves, price reductions may be necessary to improve the competitiveness of the value offered, especially in the near future. The focus here will quickly have to turn to the export market as the segment for these higher prices wines is becoming saturated in Serbia (depending on income growth and tourism trends).

2.6. ELEMENTS OF A GRAPE VALUE CHAIN DEVELOPMENT PLAN

Table 5 provides some illustrative examples of activities that can be undertaken under each of the five strategy components discussed above. While some activities will play out in the long term (such as facilitating the expansion of vineyards), many activities will have an effect in the short term.

TABLE 5: ILLUSTRATIVE ACTIVITIES FOR UPGRADING IN THE SERBIAN WINE VALUE CHAIN

Activities	Details
Component 1: FDI/Partnerships at the Industrial Winery Level	
Develop and promote attractive investment packages	Working with the struggling industrial wineries (Navip, Coka, and Vrsacki Vinogradi) and the Government of Serbia (most notably the Serbia Investment and Export Promotion Agency – SIEPA), develop investment packages that reflect a true market value (for example, obsolete equipment has a negative value), that have strong incentives, and that address any concern the investor may have. Bring in FDI experts familiar with the wine industry to put these packagers together. Developers should consider both the investment in vineyards and processing technology as investors are likely interested in a package that contains both. Securing large tracts of good land for vineyards in a pre-EU accession country may be attractive to some investors. Careful selection of potential investors is needed to assure the FDI contributes to the vision for the Serbian wine industry (see Component 5 activities below). Promotion among diaspora should be explored here as well.
Assist in the development and implementation of a marketing strategy at the low-medium price segment level	Bring in experts in winemaking and wine marketing to develop: 1) wine styles that are preferred by consumers in the domestic and export markets; 2) internal processing procedures that ensure consistency in quality (including sanitation, laboratory testing, blending, and storing); and 3) a branding strategy. These three things will form components of a marketing strategy that emulates the success of the New World and leading Macedonian/Montenegro wines.
Component 2: Promotion of Serbian Wine	
Facilitate market intelligence gathering	Working with newly established or existing BSPs, establish a for-fee market intelligence firm that collects, analyses, and reports web-based in Serbian market data, and can assist in the development of marketing strategies catering to the specific needs of the Serbian wine industry.
Design a national promotion strategy for the wine industry in Serbia	With VIVIS as the home, bring in wine marketing specialists to help develop a vision for the Serbian wine industry. Based on this vision, develop a generic promotion strategy for Serbian wines as a whole. Linked to this, VIVIS should set compulsory and voluntary quality standards to ensure a strong and positive collective reputation in the market. Apart from VIVIS, modern retailers and the Government of Serbia (most notably SIEPA) should be key participants in the joint development of this promotion campaign, focused initially on the domestic market and (agri-) tourism-related markets. The dynamic medium-sized wineries should spearhead this effort on the wineries side.
Promotion in the domestic market	Facilitate collaboration between VIVIS, the Association of Sommeliers of Serbia, distributors, and supermarket chains in rolling out the national promotion strategy in the domestic market (including tastings, point-of-purchase displays, and more). Assist VIVIS in establishing and promoting an annual national (or regional) wine competition with international judges in Serbia that will promote a quality reputation for Serbian wines. Wine of the Month campaigns in major supermarket chains is another option.
Facilitate participation in regional and international trade fairs	Assist VIVIS (and SIEPA) in rolling out the promotion campaign through participation in well-known food and wine fairs in key target markets and in getting (positive) press reviews linked to this participation. Fairs near Serbian diaspora markets should be priority targets.
Component 3: Expand/Build Quality Grape Base	
Organize workshops on contract growing and growing for the market	Bring in a wine-grape growing contract specialist to discuss—with joint participation of the growers and winemakers—how contracts are mutually beneficial and have driven the development of wine regions across the world. Use these mechanisms to facilitate linkages between commercial growers in Southern Serbia and winemakers in others part of the country. Banks interested in lending to the agricultural sector should be part of these workshops in order to link contracts to credit provision.

Activities	Details
Develop a manual for GAP in wine grape production	Translate into Serbian and adapt to Serbia a key growers guide and build a training program around it. An example of such a text is <i>Wine Grape Production Guide for Eastern North America</i> (2008) by Wolf (editor). This should be done in collaboration with the government extension services, the viticulture departments of the agricultural faculties in Zemun and Novi Sad, the Center for Viticulture and Oenology in Nis, and VIVIS.
Provide wine grape growing training (GAP)	Bring in regional or international wine-grape growing specialists to provide training on GAP in wine-grape growing for producers, using the manual developed above. To reach farmers, work through the current 49 commercial wineries and their association VIVIS, as well as through the plant material producers and importers. As suppliers to and buyers from growers, these two stakeholders have a commercial interest in providing the training to farmers as an embedded service.
Assist planting material producers or BSP in providing inputs and extension services to growers	Bring in regulatory, agronomic, and wine marketing specialists to assist planting material suppliers in producing certified planting materials that fit both the agro-climatic and target market requirements. Assist these input providers in building their extension services' capacity into an embedded service to their customers (either the growers or the winemakers contractually linked to the growers). Or seek independent BSPs to deliver this service. Connect these services to the various viticulture research programs in Serbia.
Facilitate the establishment of a national wine grape growers association	Work stepwise, forming local, regional, and then a national (apex) association, with a focus on organizational strengthening (management and finance), information distribution (website, lead farmers), and building a database on grape growers in Serbia. Special attention should be given to wine grape growers and wine makers in the economically distressed areas of Southern Serbia. Given that vineyards in these areas are smaller, group action will be even more important to achieve volumes and economies of scale that meet the demands of the wine grape buyers.
Assist in the establishment of vineyard BSPs	Contract-based services from BDS in the maintenance of vineyards to 1) replace the current system of shared resources and 2) provide additional analytical services (laboratories), would help make GAP implementation more cost efficient. Facilitating their emergence would require feasibility studies and the identification and training of potential BDS.
Component 4: Quality Improvement and Market Access at the Small Winery Level	
Assist in establishment and capacity building of a Small Wineries Association of Serbia	The interests and capacities of the smaller wineries in Serbia are not the same as those of the medium-sized and industrial wineries. An organization of their own would help them with advocacy within VIVIS and with the Government of Serbia. It would also provide an entry point for any assistance programs along the lines of other activities proposed here.
Facilitate access to credit	Working through VIVIS, lobby with the Government of Serbia for a more systematic implementation of the subsidy and loan programs for equipment upgrading for the small wineries that want to install modern processing and refrigeration equipment. Collaboration with banks interested in developing an agricultural loan portfolio, such as AIK Banka, would be a key part of this strategy, as is the development of supply contracts with supermarket chains that could facilitate solutions to small wineries' working capital constraints.
Provide wine making training	Bring in international winemaking experts to work with emerging domestic BDS providers to the wine industry to develop and implement a modern winemaking training program, especially for small wineries. The program would need to be annually updated and organized in collaboration with the leading agriculture universities and VIVIS. This training should be focused on 1) changing the style of the wine to one that is more in line with the market and 2) removing quality gaps with imported wines. One sample course manual is <i>Wine Analysis and Production</i> (1999) by Zoecklein, Fugelsang, Gump, and Nury
Establish a contract wine packing business service provider (BSP)	Assist a newly established or new BSP to start providing contract-based packaging services using mobile bottling lines. This activity should be preceded by a feasibility study.

Activities	Details
Component 5: Image Building by Medium-Sized Wineries	
Facilitate participation in international wine competitions	Working with the medium-sized wineries and SIEPA, facilitate participation in wine competitions such as International Wine Challenge (IWC), ProWein, Challenge International de Vin, American Wine Society, and Vinitaly. An integral component of this activity would be to work the press in trying to get (favorable) reviews published. Getting into publications such as the IWC's <i>Guide to the World's Best Wines</i> is another related objective.
Organize a field trip to visit leading wineries in California	Working with VIVIS, provide the opportunity for a carefully selected number of production and marketing staff from leading winemakers in Serbia to visit leading wineries in California and thus expose Serbian winemakers to global best practices. Although the emphasis here is on the medium-sized wineries, staff from industrial and small-scale wine makers should be included in this tour as well as emerging BDS providers to the wine industry.
Assist in the development of a marketing strategy for selected high-end export markets	Bring in international wine marketing experts to provide training on marketing wine for medium-sized wineries (although including small wineries as well, working through VIVIS). These market strategies should combine the best of the New World wine strategies and more boutique (Old World) elements that tell the unique story of the vineyard/winemaker that is tied to its location and history. These wines will cater to the increasing consumer segment that is looking for something new, beyond the more mass-market New World wines. Along with this training, introduce some key wine marketing texts that should be linked to new service providers and/or relevant university and Ministry of Agriculture departments. Examples of key texts are <i>Successful Wine Marketing</i> (2001) by Lapsley and Moulton; <i>Wine Brands: Success Strategies for New Markets, New Consumers, & New Trends</i> (2008) by Resnick; and <i>Wine Marketing and Sales: Success Strategies for a Saturated Market</i> (2007) by Wagner, Olsen, & Thach.

3. TABLE GRAPES

There are opportunities to grow the table grape subsector in Serbia from its current small base, both in terms of sales and jobs. The market opportunities for table grapes in Serbia are in the fresh markets, especially for certain varieties such as Hamburg and some new varieties. Grape drying or processing into juice, concentrates, or food ingredients, is insignificant in Serbia and the country does not appear to hold any competitive potential in these markets, which are dominated by large international agribusinesses (Dixon and Dimitrijevic, 2009).

3.1 TABLE GRAPE PRODUCTION AND TRADE IN SERBIA

Serbia's table grape production is small. For 2008, total production is estimated at 6,850 MT (Dixon and Dimitrijevic, 2009). The most common locally grown varieties that are also popular in the market are Muscat Hamburg, Cardinal, Black Magic, Victoria, Moldova, and Srbija. The main production areas are found around Grocka, in Fruska Gora, in Bela Crkva – Banat, and in the Central Serbian regions of Topola and Vlasotinci.

Imports are needed to meet domestic demand. While these imports fluctuated between 10,000 MT and 12,000 MT per year between 2006 and 2008, the value has increase steadily (Table 6). In 2008, import prices were 43 percent higher than they were in 2006. Imports largely consist of seasonal supplies from Macedonia. Imports start to pick up in July, peak in September and then steadily decrease, dropping back to insignificant volumes in January (Figure 6). Macedonia supplies 85 percent of the table grapes imported into Serbia (Table 7). Montenegro and Italy are the only other significant suppliers.

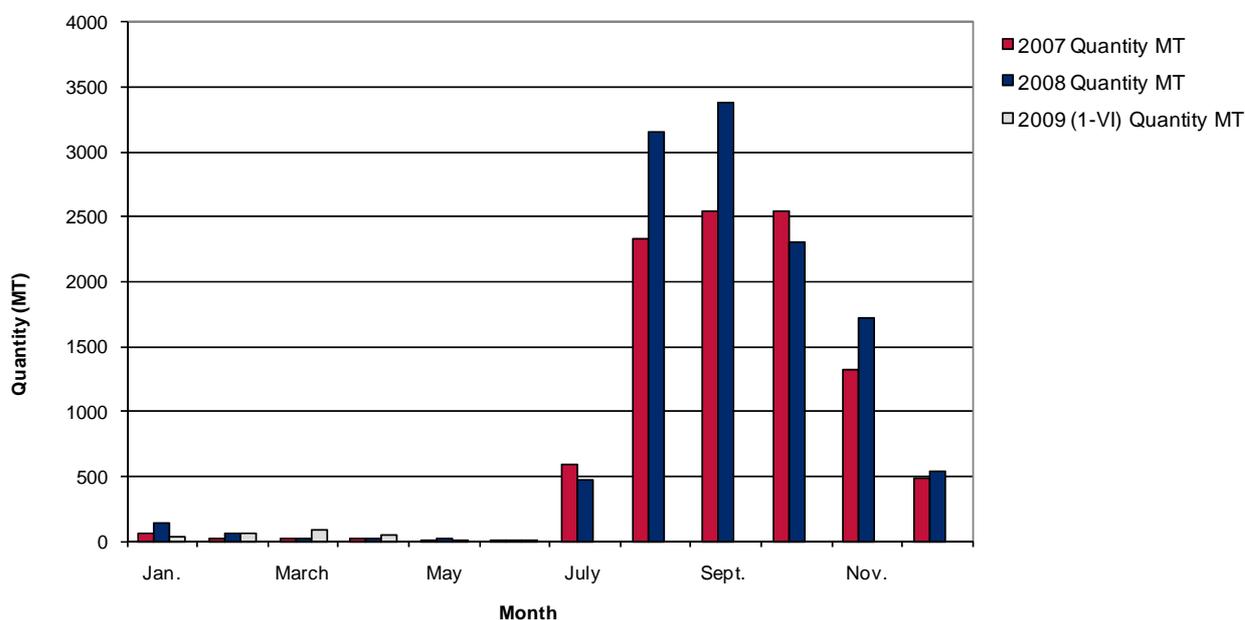
Although growing, exports of Serbian table grapes are very small. In 2008, around 450 MT valued at around US\$300,000 were exported, mostly to the Russian Federation (75 percent of the FOB value). Montenegro and Bosnia-Herzegovina are the only two other significant export markets.

TABLE 6: SERBIA TABLE GRAPE IMPORTS, 2006–2008

	2006	2007	2008
Value ('000US\$)	5,682	6,733	8,756
Volume (MT)	11,097	10,011	11,899
Price (US\$/kg)	0.51	0.67	0.73

Source: Dixon and Dimitrijevic, 2009

FIGURE 7: SERBIAN TABLE GRAPE IMPORTS IN VOLUME BY MONTH



Source: Dixon and Dimitrijevic, 2009

TABLE 7: SERBIAN TABLE GRAPE IMPORTS BY COUNTRY, 2008

Country 2008	Quantity MT	Value (1,000 US\$)	Market share by value (%)	Average Price per Country
Macedonia	10,1721.36	6,800.80	77.67	0.67
Montenegro	1,023.50	1,184.5	13.53	1.16
Italy	432.00	365.6	4.18	0.85
South Africa	64.00	184.5	2.11	2.88
Greece	124.9	83.6	0.95	0.67
Chile	40.23	55.2	0.63	2.73
Spain	40.368	25.95	0.30	2.68
Turkey	37.6	24.7	0.28	0.66
Peru	6.9	7.7	0.09	1.13
Argentina	2.7	7.2	0.08	2.71
Israel	2.0	3.7	0.04	1.84
Morocco	0.8	3.4	0.04	4.38
Saudi Arabia	1.0	2.7	0.03	2.70
Brazil	0.9	2.4	0.03	2.62
Namibia	0.5	2.1	0.02	4.70
India	0.6	1.6	0.02	2.59
TOTAL:	11,899.2	8,755.7	100	2.19

Source: Serbian Chamber of Commerce

3.2 END-MARKETS FOR SERBIAN TABLE GRAPES

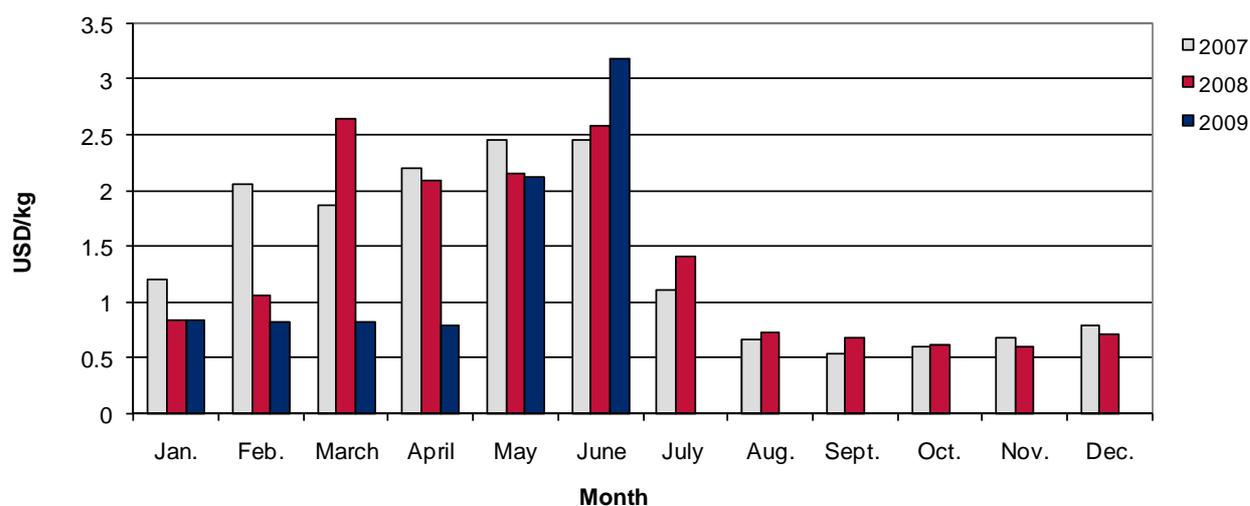
In the domestic market, per capita consumption has been on a slow increase in recent years and is anticipated to remain on this growth path as consumer purchasing power increases over time (Table 8). Dramatically increasing import prices over the last few years indicate that consumers are willing to pay a higher price for a higher quality and that they are willing to buy more out of season when prices are much higher (Figure 8). Current consumption is estimated at 19,000 MT per year, of which 7,000 MT (35 percent) is produced domestically, and 11,000 MT (65 percent) is imported. The retail market value for table grapes in Serbia can be estimated accordingly at \$19 million.

TABLE 8: AVERAGE CONSUMPTION OF TABLE GRAPE, PER CAPITA, 2004–2008 (KG/CAPITA)

	Measure	2004	2005	2006	2007	2008
Grape	kg	1.8	1.9	2.0	2.9	2.5

Source: Dixon and Dimitrijevic, 2009

FIGURE 8: AVERAGE PRICE OF IMPORTED TABLE GRAPE PER MONTH, 2007–2009



Source: Dixon and Dimitrijevic, 2009

Marketing domestic table grapes mostly takes place through traditional farm and wholesale markets and to a large degree stays within the wider region of production. Main urban areas are mostly supplied with imported grapes. Only a small (unknown) percentage of Serbian table grapes are reaching supermarkets. The latter want easy-order, year-round supply systems, which do not exist for domestic grapes currently. Domestic grapes are sold in small volumes by individual farmers and in season, without any cold storage systems in use to extend the supply window.

Given the narrow supply window for domestic grapes (mainly September), it is no surprise that retail prices for table grapes in Serbia fluctuate significantly throughout the year. Average retail prices in 2007

were in the RSD70-80/kg range, but varied greatly by variety. In 2008, Muscat Hamburg grape prices varied from RSD71/kg to RSD140/kg, Cardinal grape prices were in the RSD65-220/kg range, and Smederevka grapes were in the RSD40-70/kg range.

At its current size and capacity, the Serbian table grape producers' main opportunities are in the domestic market. When this market is satisfied, export market options can be explored. The Russian Federation appears to hold good potential, given the combination of fast growing demand there and the zero-duty regime enjoyed by Serbia. Russia is already the dominating export market for Serbian table grapes, but to truly penetrate the Russian market, it will be critical to achieve sufficiently large volumes and meet Russian GAP standards. Other markets with potential have to be found in the region. For example, traders from Montenegro and Bosnia-Herzegovina already come to Serbia to buy grapes directly from farmers because of the popularity and high quality of the Hamburg grape variety grown in certain regions of the country. Serbia's capacity to deliver a higher-quality table grape than the average product coming out of Macedonia was confirmed by several key informants.

3.3 THE TABLE GRAPE VALUE CHAIN

The table grape value chain in Serbia is relatively simple in structure: it involves two largely separated channels. These two channels only overlap, to some degree, at the semi-wholesaler and small shopkeeper level.

The first channel is the import channel in which importers of various sizes—including some larger ones handling 1,000 MT of table grapes per year—sell directly to supermarkets or through semi-wholesalers sell to smaller retail shops in the main urban areas. This channel is characterized by year-round supply (although most supplies come in between July and December) and palletized volumes of well packaged and labeled grapes.

The second channel consists of an unknown number of domestic farmers who individually sell grapes in small batches to nearby shops and HoReCa establishments (at relatively high prices) or through semi-wholesalers sell to small shopkeepers in the main urban areas. Cold chain technologies would not help to extend the season in this channel because of the small current volumes. As volumes go up, however, farmers in this channel will have to integrate into the import distribution system.

The more commercially oriented table grape growers in Serbia are organized in cooperatives. A larger cooperative can have around 100 members who produce around 1,000 MT of grapes from 70 ha. Not all of these grapes are varieties for fresh consumption—a significant share typically is taken up by wine grapes that often going into cognac production. Even though some of these cooperatives have their own label, members still tend to transport and sell their grapes individually.

3.4 SYSTEMIC CONSTRAINTS AND UPGRADING OPPORTUNITIES

The main constraints to the development of the table grape value chain in Serbia are to be found at the grower level. Total production volume is small, scattered, and marketed in small batches using mostly primitive packaging formats by semi-professional growers. The latter links back to the limited impact of government subsidies: these are only given to full-time farmers; for many table-grape growers, farming is only a part-time job. There are no consolidation centers or cold rooms established by and for table-grape growers. Grape growers' associations or cooperatives are absent or weak. Furthermore, growers typically mistrust the larger, modern wholesaler-distributors in terms of receiving (fair) payment for their grapes.

These farmers are to a large degree driven by the short-term strategies of selling wherever the price is the highest at any given moment. There is a significant potential for the development of the table grape value chain, but only if fundamental structural changes take place at the grower level.

3.5. VISION AND STRATEGY FOR IMPROVED COMPETITIVENESS AND GROWTH

Our vision is that by 2020, commercial table grape production in Serbia will have grown to an annual production level of 12,000 MT (around 50 percent of total domestic demand). In terms of variety selection, quality, availability, price, and packaging format, Serbian table grapes will be highly competitive with imports from Macedonia.

The core strategy for achieving this vision consists of 1) improved, long-term relations with leading fresh fruits distributors and supermarkets in Serbia (the main objective and starting point); 2) improved business service provision to the growers; and 3) collective action at the grower level through high-capacity marketing cooperatives.

3.6. ELEMENTS OF A GRAPE VALUE CHAIN DEVELOPMENT PLAN

The activities for wine grape growers proposed in strategy Component 4 (Expand/Build Quality Grape Base) above will also benefit table grape growers as these are often the same farmers, plus there will be spillover effects as these farmers interact with each other.

The main strategic intervention for the domestic table grape growing industry is to establish a cold-storage-based, vertically coordinated supply chain that is linked to all the main urban markets. This could be tested through a demonstration case, involving a selected farmer cooperative (such as the Table Grape Growers Association of Topola), a collection center with cold storage (such as a fruit cooperative in the Topola region with controlled atmosphere storage), a national distributor that understands supermarket procedures and delivery requirements and has empty backhaul volume available (for example, MDD in Novi Sad), and a supermarket chain (such as Mercator). The business model would start with a specific order/contract from the supermarket with the growers group. The collection center would provide assembling, packaging, and administrative services, and the distributor would provide the transportation, storing, and distributing services. Grapes would be stored either to spread sales out over time or to sell at a time when prices are higher later in the year.

Variations on this theme can be explored, based on the directness of the channel (number of intermediaries) or the nature of ownership (marketing service provision versus purchase at various levels). Joint ventures provide additional options (for example, the farmer group joins the collection center and invests in its expansion). The value chain stakeholders listed above all expressed interest in trying out this new supply channel in one form or another.

In practical terms, this intervention has two main activities: conduct a feasibility study and facilitate the market linkages.

Conduct a Feasibility Study

New models will only be taken up if they are profitable for all parties involved. Therefore, it is essential to look at profitability of the possible vertical linkage permutations through a detailed financial feasibility study that also includes a risk analysis.

Facilitate the Market Linkages

Once profitability is demonstrated on paper, a stakeholder workshop must be organized to discuss the pros and cons of the various ways of collaborating and to facilitate a consensus model. Contracts between parties will then operationalize this model. At this stage, it will be critical to foresee risk factors and to develop mechanisms to mitigate these risks. For example, the growers association can decide to sell only 70 percent of its production to the new buyer in order to reduce its dependency risk of having only one buyer.

APPENDIX: LIST OF KEY INFORMANTS

Bozovic, Predrag – Research Assistant Viticulture, University of Novi Sad
Ciaschini, Matthew – Independent US Wine Value Chain Expert
Dajic, Milos – Cajic Winery
Damjanovic, Milan – Director, ULO Cold Storage
Djurasovic, Dusko – President, MDD Group (cold storage facility)
Draskovic, Natasa - Marketing Manager, Aleksandrovic Winery
Jaksic, Darko – Head, Department of Viticulture and Wine Production, MoAFWM
Jojic, Djurdjica – Mackov Cellar Winery
Kalapis, Milos - Vrsacki Vinogradi Winery
Kaplanovic, Zoran – Do Kraja Sveta
Kovacevic, Ivan – Wine Category Buyer, Metro
Kovacevic, Miroslav – Owner-Manager, Kovacevic Winery
Maslovara, Dejan – Wine and Pleasure Wine store and Dibonis Winery
Milosavljevic, Dragan, - Villa Vinum Winery
Mladenovic, Nikola - Matalj Winery
Nikolic, Aleksandar – Tikves Winery
Nikolic, Vladan - Winemaker, Aleksandrovic Winery
Pavlovic, Rade – Owner, Suntrade (wine distributor/importer)
Radenkovic, Gvozden - President, National Association of Viticulturist and Winemakers (VIVIS)
Radovanovic, Miodrag – Podrum Radovanovic Winery
Samardzija, Petar – Independent Wine Writer and Journalist
Svircev, Milutin – Manager, Enoteka Premier (wine shop in Belgrade)
Tomic, Sasa – President, Table Grape Growers Association Topola
Zagorac, Miroljub – Director Marketing, Navip
Zivanovic, Borivoj – Manager, Zivanovic Wine Cellar
Zivkovic, Podrum –Zivkovic Winery, Sremski Karlovci

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